## Abstract 265

**TITLE:** Surveillance for HIV-l Subtypes in the United States

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**OBJECTIVES:** In the United States, human immunodeficiency virus (HIV-l infections are predominately subtype B. However, as the epidemic progresses, the introduction and transmission of different subtypes becomes more likely. We implemented a sentinel surveillance system to monitor the prevalence of HIV subtypes.

**METHODS:** Beginning in 1998, blood and epidemiologic data have been collected on consecutively enrolled, newly diagnosed (within the past year) HIV infected-patients, who are at least 18 years old and have no history of AIDS defining illnesses according the 1993 CDC AIDS case definition. The study is conducted in 29 HIV testing sites and clinics in 10 cities. Serotyping was done using V3 loop peptides and has been completed for all specimens through December 1998. Specimens serotyped as non-B or ones that could not be typed, and a random sample of specimens serotyped as B were subjected to direct sequencing of the C2V3C3 region of the env gene and the p17 region of the gag gene. Phylogenetic analysis of the sequence data was then conducted, and the subtypes were determined.

**RESULTS:** Of the first 199 HIV-infected persons tested, 75% were men. The mean age was 34 years (s.d. $\pm$ 28.7 years). Most were African American (52%) or Hispanic (20%). 17% were born outside the U. S. 42% were men who have sex with men and 9%were injection drug users. Preliminary results show that 159 (80%) were serotype B while the remaining were serotyped as non-B or were non-typable. Of the 40 individuals without a B serotype, direct sequencing identified one G subtype (based on the p17 sequence) and one A subtype (based on the C2V3C3 sequence); the remaining had subtype B virus. All 14 specimens serotyped as B and randomly selected for direct sequencing were also subtype B. The persons who had subtypes A and G moved to the U. S. from Sierra Leone in 1997 and from Gabon in 1998, respectively.

**CONCLUSIONS:** Preliminary data suggest that the presence of non-B HIV-l isolates remains uncommon and limited to persons presumably infected outside the U. S. Continued surveillance will be necessary to better characterize HIV-1 subtypes over time. The development of HIV vaccines in the U.S. may need to consider the presence of non-B subtypes in the future.

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